**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_( )**



**Class: \_\_\_\_\_\_\_\_**

**P6 Alternative Assessment**

*Research-Investigation-Journal Writing*

**Rationale**

To provide opportunities to engage pupils in innovative and creative work arising from mathematical ideas or situations.

**Objectives**

To provide pupils with opportunities to

* work on an open mathematical idea or situation;
* research on a mathematical idea or situation based on one’s interest;
* explore and experiment mathematical ideas and situations in different directions;
* self-assess own learning and mathematical thinking processes;
* reflect on own strengths and weaknesses and what they can do to make improvements.

**Brief Description**

It is a structured and guided research as well as an investigation and journal writing assignment which pupils work on individually. Each pupil has to choose an assignment from a list of 7 titles. Pupils have to do research on the assignment chosen and use a variety of problem solving heuristics and thinking skills to understand mathematical ideas or situations and solve investigative problems. In addition, they have to constantly reflect on their thinking and working processes.

Pupils will be assessed based on their research write-up and abilities to describe, justify solutions and document steps they have taken to arrive at their solutions as well as reflect on their own learning. All write-ups (excluding diagrams) must be type-written. Diagrams, if any, should be drawn neatly. Pupils are also expected to create products to demonstrate their understanding of concepts. The assignments will be monitored regularly by the teachers and each pupil has to arrange for meetings with their teachers to discuss the progress of their assignments.

**Working Timeframe (refer to Table 1)**

Pupils have about 10 weeks to work on the assignments at their own pace. They should plan their work schedule carefully and should not leave all the work to the last minute.

*Term 1 Week 1 – Term 1 Week 10*

*(05 January 2015 – 11 March 2015)*

Pupils must confirm their choice of assignment within week 2 through the submission of the pupil form. **No changes will be allowed after 16 January 2015**.

Table 1: Working Timeframe

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Week 1 - 2** | **Week 2** | **Week 4** | **Week 6 - 8** | **Week 10** |
| **05 Jan – 16 Jan** | **12 Jan – 16 Jan** | **26 – 30 Jan** | **9 – 27 Feb** | **Submission date:**  **11 Mar**  **(Marks may be deducted for late submission)** |
| - Pupils are briefed on the nature of the assignment and the assessment guidelines.  - Pupils may begin their research/ investigation | - Pupils confirm their choice of assignment by **16 Jan 2015**.  - Submission of pupil form.  - No requests for changes will be considered thereafter. | 1st checkpoint:  Pupils report to teachers on their progress. | Pupils report to teachers on their progress.  To be scheduled by teachers. |

**Assessment Guidelines**

The alternative assessment is part of the continual assessment which constitutes 10% of the overall result in Semester 1. The guideline for marking the three sections in the assignment is as follows:

|  |  |  |
| --- | --- | --- |
| **SECTION** | **DESCRIPTION** | **MARKS** |
| A | Research and Investigation | 17 |
| B | Product |
| C | Reflection | 3 |
| **Total Marks:** | | **20** |

**TITLES OF ASSIGNMENTS**

|  |  |
| --- | --- |
| **ASSIGNMENT** | **TITLE** |
| 1 | Line design |
| 2 | Break the code |
| 3 | Pigeons & Pigeon-holes |
| 4 | Shortest path |
| 5 | Solid figures |
| 6 | Pick’s Theorem |
| 7 | Statistics |

**Mathematics Alternative Assessment 2015**



I have read the instructions regarding the Mathematics Alternative Assessment and agree:

1. that my choice of assignment, as indicated below, is final;
2. to produce original work and cite all references;
3. to adhere to the working timeframe as described;
4. to exercise initiative and responsibility in monitoring and completing my own work; and
5. to submit my completed assignment by **11 March 2015**. I understand that marks may be deducted for late submissions.

*This portion is to be retained by the pupil.*

*This portion is to be returned to the teacher.*

**Mathematics Alternative Assessment 2015**

**Pupil Form**

I, \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (name), from Primary \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (class) of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (school) have read the instructions regarding the Mathematics Alternative Assessment and agree with points (a)-(e) above.

My confirmed choice of assignment is:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I am aware that the deadline for this assignment is **11 March 2015**.

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |
| Pupil’s signature |  |  |  |
| Acknowledged by: |  |  |  |
| Parent’s signature |  | Date: |  |
|  |  |  |  |

*This form is to be submitted to your teacher on 16 Jan 2015. No requests for changes to the choice of assignment will be considered thereafter.*